

CLAIMS

1. A pneumatic-tire-use electronic-device fixing system for
fixing an electronic device to be mounted on a pneumatic
tire, the pneumatic-tire-use electronic-device fixing
system comprising:

5 an electronic-device housing apparatus, which houses the
electronic device, and which includes an engaging convex
portion that is convex; and

10 an electronic-device housing apparatus support, which is
provided on an inner surface of the pneumatic tire, and
which includes an engaging concave portion that is
concave, wherein:

15 first pullout suppression means which suppresses pullout
of the engaging convex portion from the engaging concave
portion is provided on at least a part of a surface of
the engaging convex portion; and

20 second pullout suppression means which engages with the
first pullout suppression means is provided on at least
a part of a surface of the engaging concave portion.

25 2. The pneumatic-tire-use electronic-device fixing system
according to claim 1, wherein:

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at least a part of the surface of the engaging convex portion includes a first zigzag region formed in a zigzag; and

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at least a part of the surface of the engaging concave portion includes a second zigzag region formed in a zigzag, the second zigzag region engaging with the first zigzag region.

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3. The pneumatic-tire-use electronic-device fixing system according to any one of claims 1 and 2, wherein:

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the engaging convex portion includes a first insertion hole;

the engaging concave portion includes a second insertion hole communicating with the first insertion hole,

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the pneumatic-tire-use electronic-device fixing system further comprising a lock pin to be inserted into the first and second insertion holes which have been made to communicate with each other.

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4. The pneumatic-tire-use electronic-device fixing system according to any one of claims 1 to 3, wherein the electronic-device housing apparatus support is a rubber

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body provided inside the pneumatic tire inward of an inner liner of the pneumatic tire.

5. The pneumatic-tire-use electronic-device fixing system according to any one of claims 1 to 4, wherein the electronic-device housing apparatus support is provided on the pneumatic tire in steps of molding and vulcanizing the pneumatic tire.
- 10 6. A pneumatic tire comprising an electronic-device housing apparatus support which supports an electronic device housing apparatus having an engaging convex portion that is convex, wherein:
 - 15 the electronic-device housing apparatus support is provided on an inner surface of the pneumatic tire, and includes an engaging concave portion that is concave; and pullout suppression means is provided on at least a part of a surface of the engaging concave portion, the pullout suppression means engaging with the engaging convex portion and thereby suppressing pullout of the engaging convex portion from the engaging concave portion.
 - 20 7. The pneumatic tire according to claim 6, wherein at least a part of the surface of the engaging concave portion includes a zigzag region formed in a zigzag.

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8. The pneumatic tire according to any one of claims 6 and
7, wherein the electronic-device housing apparatus
support is a rubber body provided inside the pneumatic
tire inward of an inner liner of the pneumatic tire.
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9. The pneumatic tire according to any one of claims 6 to
8, wherein the electronic-device housing apparatus
support is provided on the pneumatic tire in steps of
molding and vulcanizing the pneumatic tire.
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10. An electronic-device housing apparatus, which is
supported by an electronic-device housing apparatus
support including an engaging concave portion provided
on a pneumatic tire, and which houses an electronic device
mounted on the pneumatic tire,
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the electronic-device housing apparatus comprising an
engaging convex portion that is convex, wherein

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pullout suppression means, which engages with the
engaging convex portion, and which suppresses pullout of
the engaging convex portion from the engaging concave
portion, is provided on at least a part of a surface of
the engaging convex portion.

11. The electronic device housing apparatus according to

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claim 10, wherein at least a part of the surface of the engaging convex portion includes a first zigzag region formed in a zigzag.

5 12. The electronic device housing apparatus according to any one of claims 10 and 11, wherein:

the engaging convex portion includes a first insertion hole;

10 the engaging concave portion includes a second insertion hole communicating with the first insertion hole; and

15 the electronic-device housing apparatus is fixed by a lock pin inserted into the first and second insertion holes which have been made to communicate with each other.

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